National Park Service
U.S. Department of the Interior

Denali National Park and Preserve
Alaska

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

FOR CONSTRUCTION OF TWO NEW TRAILS STARTING IN THE FRONTCOUNTRY AREA OF DENALI NATIONAL PARK

August 2006

Recommended: _____ _____
Superintendent — Date
Denali National Park and Preserve

Approved: _____ _____
Regional Director, Alaska — Date

FINDING OF NO SIGNIFICANT IMPACT

FOR CONSTRUCTION OF TWO NEW TRAILS STARTING IN THE FRONTCOUNTRY AREA OF DENALI NATIONAL PARK

Denali National Park and Preserve, Alaska
August 2006

The National Park Service (NPS) prepared an environmental assessment (EA) to evaluate a proposal to rehabilitate, re-route, and formalize two trails in heavily used parts of backcountry that are accessed along the first 15 miles of the park road in the entrance area of Denali National Park and Preserve (Denali). The Triple Lakes Trail is a 7 mile long trail that was built as a connection between the entrance area and the McKinley Village area and it needs upgrading and re-routing in a number of areas. The trail has been closed at the north end due to concerns over resource damage on a wet hillside as well as safety concerns from use of the Alaska Railroad (AKRR) trestle for the crossing of Riley Creek. The Savage Alpine Trail was identified in the 1997 Entrance Area and Road Corridor Development Concept Plan/Environmental Impact Statement (DCP/EIS) as a new trail for increased recreational opportunities. Existing pedestrian use of the hillslopes above the Savage River parking area has already created a social trail that is not sustainable and the Upper Savage Trail would be constructed to formalize a route for that use.

The NPS has selected Alternative 2 - Construction of Two New Trails Starting in the Frontcountry Area (NPS Preferred).

One public comment was received during the 30-day open review period. No additional information has been added to the EA.

ALTERNATIVES

Two alternatives were evaluated in the EA.

Alternative 1, No Action (the Environmentally Preferred Alternative)

Under this alternative the NPS would not put the Triple Lakes Trail on park maps or tell visitors about the trail due to the closure of the northern part of the trail. Upgrades to the southern part of the trail would not take place although some brushing and maintenance actions could occur.

No Savage Alpine Trail would be constructed above Savage Rock. Visitors hiking above the rock would find their own path to ascend or descend.

Alternative 2, Construction of Two New Trails Starting in the Frontcountry Area (NPS Preferred)

Under this alternative the NPS would re-route, reconstruct and maintain the Triple Lakes Trail and would formalize and construct a Savage Alpine Trail.

Triple Lakes Trail

The trail would have a length of 37,000 feet (7.0 miles), have an average width of 24-30 inches (36 inches where accessible), and be a combination of the existing trail route (with improvements) and significant reroutes. The trail would leave the McKinley Station Trail on the Hines Creek floodplain near the Riley Creek railroad trestle and would require bridges for Hines and Riley Creeks. The proposed bridge site for Hines Creek would be approximately 800 feet upstream from the trestle, at a spot where an informal footbridge existing during the early 1980s. The trail would then follow a historic road upstream 900 feet and cross Riley Creek. The Hines Creek bridge, its approaches, and the trail to the Riley Creek bridge would provide for ADA access from the McKinley Station trail to the original park headquarters area.

Once on the east bank of Riley Creek, the trail would follow the existing route through rolling hills and deciduous forests for 2800 feet until the trail enters an area of black spruce and permafrost tundra. At this point the new trail would leave the existing route for 5300 feet and bear southwest to follow a bench above Riley Creek by alternately crossing mixed evergreen-deciduous knolls and small drainages. Within the mixed forest, one open tundra section of 400 feet would have to be crossed by a running plank boardwalk. The trail would then southeast and do a long traverse on the north face ending at the top of the ridge to connect to the existing trail.

From there the trail would use the existing route, mostly along the top of the ridge, for 28,000 feet, except for 1) short re-routes on top of the ridge to avoid dense alder and provide for improved views of the Riley Creek drainage and mountains to the west: 2) a 2500 foot steep re-route to avoid using the fall-line on the way down the south end of the ridge toward the lakes; 3) short re-routes to avoid poor sections of ground while heading southeast above the lakes; and 4) a 1300 foot re-route to avoid saturated ground, mud holes, permafrost, and fall-line drops while heading northeast toward the southern trailhead.

Borrow pits would be developed where they would not be visible to hikers. When possible a borrow excavation would be re-filled with sub-standard soils removed from the trail tread. Sites would also be chosen so they could be re-contoured to look natural. Brush would be tossed away from the trail to decompose on its own. Material would be moved by hand wheelbarrow, power wheelbarrow, helicopter sling loads (super sacks) and by back pack. Gravel and soils would be compacted by a 21” wide gas-powered plate compactor, if necessary.

If a suitable location would be found, a spike camp for one 8 person youth crew would be developed to minimize commute time to the project. The camp would be restored when the project is finished.

Gas powered jackhammers would be used to drive anchor hardware into the ground for the main

cables. The bridge decks would be a minimum of 6 feet above the average low water level. The approach ramps for the Hines Creek bridge would have a grade of 8.3%.

Winter users use Hines and Riley Creeks for skiing and mushing. Winter access at the bridges would be either on the ice and snow under the bridges or on short bypass trails snowshoed in by the NPS each winter.

The park's trail crew would salvage as much in the way of vegetation mats as is possible during construction of the trail re-routes for use in revegetating abandoned trail segments. At least one rest site along the trail would be devoted to interpreting wetland/floodplain values of the area.

Savage Alpine Trail

This 18-24 inch wide trail would be constructed to extend uphill from the recently finished trail to the Savage Rock above the Savage East parking lot. The Savage Rock Trail extends up to an elevation of about 2800 feet. The Savage Alpine Trail would create a loop around the next major promontory uphill of the Rock, approximately 600 feet higher in elevation. The southern part of the loop would have long even grades that range between 20-25%. The tread would be benched into the slope and most of the material used to shape the tread would be from the cuts used to create the benched trail. Additional material may have to be brought in by helicopter in super sacks. The trail would be outsloped up to 10% to shed water without the need for structures like waterbars. The trail would then loop back down on the northern side of the promontory to the starting point and some segments on this side may reach up to a 30% grade. The total trail length would be 6400 feet (1.2 miles). Social trails have been proliferating on the slope below the promontory and they would be closed off and allowed to revegetate.

PUBLIC INVOLVEMENT

The EA was issued for public review and comment from July 10, 2006 to August 8, 2006. The EA or a notice of the EA was sent by mail or email to government agencies, interest groups and individuals. The EA was posted on the NPS planning website and the park's webpage. The park issued a press release on July 7, 2006 about the availability of the EA and the open comment period.

One written comment was received. The environmental group commenting supported the NPS preferred alternative. The public comment received did not change the conclusions in the EA about the environmental effects of the action and no responses to the comment are attached.

DECISION

The NPS decision is to select Alternative 2 - Construction of Two New Trails Starting in the Frontcountry Area (NPS Preferred)**.** This will allow the NPS to provide additional recreational and interpretive opportunities near the non-restricted part of the road corridor of Denali, to mitigate resource damage from past and present hiker use in the area, to mitigate safety concerns

from unauthorized use of the railroad trestle over Riley Creek, and to provide connections between heavily used activity areas of the park entrance and road corridor areas.

Mitigating Measures

The following mitigation measures apply to the selected Alternative 3, Claimant's Sampling Plan Amended by NPS (Preferred Alternative). Mitigation measures are specific actions that when implemented reduce impacts, protect park resources, and protect visitors.

Vegetation. Vegetation mats that need to be moved from the trail surface would be saved and moved to abandoned trail segments. Periodic surveys would be conducted to determine the presence of exotic plants. Borrow pits would be developed where they would not be visible to hikers. When possible a borrow excavation would be re-filled with sub-standard soils removed from the trail tread. Sites would also be chosen so they could be re-contoured to look natural.

Wildlife and Habitat. The NPS would follow established guidelines in the park's bear-human conflict management plan. The plan requires staff and operators to use bear-proof containers for food and refuse and sets up guidelines for temporary closures. If a suitable location would be found, a spike camp for one 8 person youth crew would be developed to minimize commute time to the project. The camp would be restored when the project is finished.

Cultural Resources. Surveys for cultural resources have taken place in the entrance area over the past two decades. If previously unknown cultural resources were located during construction, the project would be halted in the discovery area until cultural resource staff could determine the significance of the finding. Mitigation standards would be established to limit any damage to the cultural information present at the sites.

Visitor Use and Recreation. The Hines Creek bridge, its approaches, and the trail to the Riley Creek bridge would be constructed to ADA standards and provide for ADA access from the McKinley Station trail to the original park headquarters area. The approach ramps for the Hines Creek bridge would have a grade of 8.3%. Visitors would be advised in park announcements, programs, and publications that there would be temporary inconveniences from construction work on the two trails.

The bridge decks would be a minimum of 6 feet above the average low water level. Winter users use Hines and Riley Creeks for skiing and mushing. Winter access at the bridges would be either on the ice and snow under the bridges or on short bypass trails snowshoed in by the NPS each winter.

Rationale for the Decision

The selected action, Alternative 2 with mitigating measures, will satisfy the purpose and need of the proposal better than other alternatives. The 1997 DCP/EIS approved the upgrade and relocation as necessary of a seven-mile long Triple Lakes Trail with footbridge to the Riley Creek Campground area. The decision also approved a trail at the Savage River Rest Stop "up

the ridge to the east" and also labeled it as the "Alpine Trail". The decision on the DCP/EIS designated certain areas around the park entrance and along the road corridor for increased development which would provide a variety of expanded opportunities for visitors in the entrance area and along the road corridor of the park over the next 15-20 years. Among the developments in which the NPS has traditionally specialized are trails. This concept was widely supported during public review of the DCP/EIS. These trails are needed because heavy pedestrian use in both areas has caused and would cause in the future increased resource damage on unsustainable route locations.

Adverse impacts, such as the removal of 0.7 acres of spruce forest and 0.4 acres of alpine and shrubby vegetation, the placement of a boardwalk trail across 0.02 acres of wetlands, and the removal of 1.1 acres of wildlife habitat and the temporary dispersal of nearby wildlife, will result in the following impacts: a minor adverse impact on vegetation; a negligible impact to wetlands; and a minor impact to wildlife and habitat. Positive impacts are expected for cultural resources from increased education about early park history and to visitor use from intermediate length backcountry trails easily accessible from the park's frontcountry. Positive benefits are also expected for wilderness resource values when weighing the net gain from eliminating trail braiding at areas of increasing visitor use versus the limited use of a helicopter and other motorized use during construction. These impacts will not result in an impairment of park resources fulfilling specific purposes identified in legislation establishing the park or key to the natural or cultural integrity of the park and will not violate the NPS Organic Act.

The No-Action alternative would not impair park resources, but it also would not achieve the objectives of maintaining existing trails, providing short loop trails along the road corridor, and concentrating hiker use where experience has shown that dispersed use is leading to adverse resource impacts.

Significance Criteria

The selected alternative, Alternative 3 with mitigating measures, will not have a significant effect on the human environment. This conclusion is based on the following examination of the significance criteria defined in 40 CFR Section 1508.27.

1. *Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.* Alternative 2 will have no impacts or positive benefits on floodplains; air resources; threatened, endangered or other special status species, natural soundscapes, cultural resources, wilderness resource values, subsistence, visitor use, local communities and socioeconomic resources, and minority and low income populations. Impacts to vegetation, wetlands, soils and wildlife will range from negligible to minor effects.

2. *The degree to which the proposed action affects public health or safety.* A positive impact on public safety by providing a means of access across Riley Creek that does not include using the railroad trestle. No impact on public health.

3. *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetland, wild and scenic rives, or ecologically critical areas.* No known, unique characteristics are located within or near the area, except for national park lands. The project is expected to have positive impacts for cultural resources from increased education about early park history

4. *The degree to which effects on the quality of the human environment are likely to be highly controversial.* The EA analysis and public comment do not indicate that any effects presented in the EA are controversial.

5. *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.* The EA analysis and public comments do not indicate that any effects are highly uncertain or involve unique or unknown risks.

6. *The degree to which the action may establish a precedent of future actions with significant effects or represents a decision in principle about a future consideration.* Alternative 2 does not establish a precedent for future actions with significant effects or represent a decision about a future consideration.

7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.* Other trail proposals have been proposed or approved in the 1997 DCP/EIS. Future related actions could be proposed and would be evaluated at that time as to whether there would be a cumulatively significant impact.

8. *Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.* Alternative 2 will not adversely affect any eligible sites or cultural resources.

9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.* According to the U.S. Fish and Wildlife Service, no known endangered, threatened, special concern or candidate species occur in the area.

10. *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.* Alternative 2 does not violate any Federal, State or local environmental protection law.

FINDINGS

The levels of adverse impacts to park resources anticipated from the selected alternative will not result in an impairment of park resources that fulfill specific purposes identified in the establishing legislation or that are key to the natural or cultural integrity of the park.

The selected alternative complies with the Endangered Species Act, the National Historic Preservation Act and Executive Orders 11988 and 11990. There will be no significant restriction of subsistence activities as documented by the Alaska National Interest Lands Conservation Act, Title VIII, Section 810(a) Summary Evaluation and Findings.

The NPS has determined that the selected alternative does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, in accordance with the National Environmental Policy Act of 1969 and the regulations of the Council on Environmental Quality (40 CFR 1508.9), an environmental impact statement is not needed and will not be prepared for this activity.